ACC NRI AR7000878

SOURCE CODE: UR/0058/66/000/009/E091/E091

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Getiya, M. Sh.; Galustashvili, M. V.

TITLE: Radiation-induced changes in dislocation density in lithium fluoride crystals irradiated in a reactor at normal and low temperatures

SOURCE: Ref. zh. Fizika, Abs. 9E731

FEF SOURCE: Sb. Elektron. i ion. protsessy v tverd. telakh. No. 2, Tbilisi, Mitsniyereba, 1965, 3-13

TOPIC TAGS: crystal dislocation, lithium fluoride, dislocation density, lithium fluoride crystal

ABSTRACT: Changes in dislocation density (DD) was observed in LiF crystals in radiated at 155 and 110K in the reactor of IRT IF AN GSSR. Irradiation at lower temperatures resulted in a lesser relative change in DD. High-temperature annealing of LiF crystals was also studied. During annealing at sufficiently high-temperatures, DD is found to drop to lower than initial values. The supposition expressed by the authors previously on the "condensing" mechanism of the radiative

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| generation defects we | of dislocations | s is repeated. he method of s | Accumulations of selective etching | of various kinds | of point |
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| found that | radiation stren | Lir crystals ofthening is ac | were investigated companied by the | d at the same ti | me. It was |
| number of | coagulated def | ect accumulat | ions which product softening is acco | e high dynamic | resistance |
| rearance o | f these flaws. | A. Kiv. [Tr | anslation of abstr | act] | [DW] |
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ACC: NR: AR7000877

SOURCE CODE: UR/0058/66/000/009/E090/E090

AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Abramishvili, M. G.

T.TLE: Formation of coloration centers in alkaline halide crystals exposed to irradiation in a reactor at room and low temperatures

SOURCE: Ref. zh. Fizika. Abs. 9E721

REF SOURCE: Sb. Elektron. i ion. protsessy v tverd. telakh. No. 2, Tbilisi, Metsniyereba, 1965, 14-18

TOPIC TAGS: color center, crystal dislocation, alkali halide, crystal absorption, crystal coloration, irradiation coloration

ABSTRACT: Kinetics of the coloration of LiF and KCl crystals was investigated following irradiation in an IRT IF ANGSSR reactor at 300, 155, and 110K. The coloration intensity was determined by the absorption coefficient for $\chi=300~\text{Mp}$. The dose-related coloration intensity proved to be nonmonotonic. During irradiation with neutron flux of lesser intensity and using a Y-screen, the coloration of crystals was found to be weaker, although the qualitative shape of the dose curve remained unchanged. Concomitantly a more intensive generation of dislocations

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ACC NR: AR7000877

took place. It was established that the coloration intensity of KCl crystals was stronger when crystals were exposed for shorter irradiation periods in the reactor and that the coloration was weaker than that of LiF crystals during longer exposure to irradiation. This seems to be in contradiction with data already published concir ning a higher accumulation rate of coloration centers during γ -irradiation of crystals with a lower lattice energy. This discrepancy is reconciled on the basis of the lithium nuclear reaction occurring in Li⁶ (n,α) H³. The agreement of the maximum dislocation density with the minimum of F-centers concentration is explained as due to the irradiation dose which determines two competitives processes: vacancies condensation and electron capture by the vacancies. A. Kiv. [Translation of abstract]

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ACC NR: AR7000864

SOURCE CODE: UR/0058/66/000/009/E039/E039

AU'THOR: Politov, N. G.; Driyayev, D. G.

TITLE: L-f internal friction in lithium fluoride crystals

SOURCE: Ref. zh. Fizika, Abs. 9E311

REF SOURCE: Sb. Elektron. i ion. protsessy v tverd. telakh. No. 2. Tbilisi,

Me:sniyereba, 1965, 35-39

TOPIC TAGS: lithium fluoride, internal friction, lithium fluoride single crystal,

lf internal friction

ABSTRACT: The temperature dependence of the internal friction (IF) of LiF single crystals was measured at a frequency of one cps. Before measurement, the specimens were annealed for five hr at 700C. They were then cooled to the temperature of liquid nitrogen and the IF was measured at a heating rate of 0.5C/min. The spectrum of IF peaks was observed on all specimens. Two of these peaks, at 160K (I) and at 210K (II), were well reproduced. With x-ray irradiation for one hr, peak I disappears and peak II increases. Deformation causes the opposite effect. Exposure at room temperature results in the recurrence of the

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| nagnitude. It app islocations. How | treatments of specimen cause similar changes, but of mulears that peak II is linked to vacancies, while peak I is livever, as yet there is no clear understanding of the nature. [Translation of abstract] | nkes to |
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ACC NR: AT7000178

SOURCE CODE: UR/3182/65/002/000/0014/0018

AUTHOR: Andronikashyili, E. L.; Politov, N. G.; Abramishvili, M. G.

ORG: none

TITLE: The formation of color centers in alkali halide crystals irradiated in a reactor at usual and low temperatures

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 2, 1965, 14-18

TOPIC TAGS: color center, neutron irradiation, irradiation effect, crystal absorption, crystal lattice dislocation, gamma irradiation, alkali halide

ABSTRACT: An investigation was made of the coloring of lithium fluoride and potassium chloride crystals irradiated in the vertical experimental channel of a reactor at room temperature (300K) and in low-temperature loops at 300K, 155K, and 110K. The IRT reactor at the Physics Institute of the Academy of Sciences of the Georgian SSR was used for the low-temperature measurements. The measurements of optical absorption by LiF crystals irradiated in a reactor channel with nv = 3.2 x 10¹² neutron/cm²sec showed that with an increase in irradiation time the coloring increased nonmonotonically: the maxima were replaced by minima. Apparently, both neutrons and gammaquanta contribute to the coloring. The comparison of results showed that in a channel with a weaker intensity of neutron flux and with a gamma-screen the specimens were

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ACC NR: AT7000180

SOURCE CODE: UR/3182/65/002/000/0027/0034

AUTHOR: Andronikashvili, E. L.; Vorozheykina, L. F.; Igitkhanishvili, D. D.; Politov, N. G.

ORG: none

TIME: Radiative changes in the conductivity of KCl and LiF crystals

SOURCE: AN GruzSSR. Institut fiziki. Elektronnyye i ionnyye protsessy v tverdykh telakh, v. 2, 1965, 27-34

TOPIC TAGS: neutron irradiation, gamma irradiation, crystal dislocation, crystal defect

ABSTRACT: An investigation was made of the relationship between the ionic conductivity and the activation energy of carriers in KCl and LiF crystals caused by reactor irradiation. The temperature dependence of ionic conductivity was investigated in the range from 50 to 400C. The heating of the specimens was carried out at a constant rate of 1 °C/min. The measurements were made in a vacuum of 10 mm Hg. The specimens were irradiated in the IRT reactor of the Physics Institute of the Academy of Sciences, Georgian SSR at a point where the thermal neutron flux was 2.07 x 10 le neutrons/cm² sec. The conductivity was measured before and after irradiation with specimens produced from a single ingot. Radiative changes in conductivity accompanied sharp changes in the crystal microstructure following

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ACC NR: AT7000180

irradiation with "critical" doses. For example, KCl crystals irradiated with a dose of 1.2 x 10¹⁶ n/cm² displayed a minimum of dislocations when the activation energy was at a minimum and the conductivity was at a maximum. KCl specimens irradiated with doses of 5.8 x 10¹⁶ n/cm² and 1.1 x 10¹⁷ n/cm² had activation energies of the current carriers of 0.96 ev and 0.84 ev, respectively. Prior to irradiation, the activation energies were 0.84 ev and 1.0 ev, respectively. The thermal treatment taking place during the measurement of conductivity in KCl specimens irradiated at 7.6 x 10¹⁵ n/cm² in the temperature range from 75 to 300C did not produce any changes in the conductivity or the activation energy of the current carriers. In LiF crystals, each thermal treatment increased the conductivity of the specimen and decreased its activation energy. The authors thank G. N. Garsevanishvili for irradiating the specimens and V. G. Kvachadze for his participation and discussion of the results. Orig. art. has: 10 figures and 1 table.

SUB CODE: 20/ SUBM DATE: none/ ORIG: REF: 002/ OTH REF: 004/ ATD PRESS: 5109

Caré 2/2

EWT(1)/T33173-66 SOURCE CODE: UR/0058/65/000/011/E090/E090 ACC NRI AR6016236 AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Vorzheykina, L. Ya.; Abramishvili M. G. TITIE: Influence of structure defects on the mechanical properties of crystals SCURCE: Ref. zh. Fizika, Abs. 11E695 REF SOURCE: Sb. Elektron. i ionnyye protsessy v tverd. telakh. No. 1, Tbilisi, Metsniyereba, 1964, 13-30 TOPIC TAGS: crystal defect, irradiation effect, potassium compound, hardness, color center, Gamma irradiation, x ray irradiation, neutron irradiation AISTRACT: An investigation was made of the influence of irradiation by x rays, yrays, and neutrons at ordinary temperatures and at liquid-nitrogen temperature on the hardness of KCl and LiF crystals. Three types of hardness were measured: the microhardness Hm, the scratch hardness Hs, and hardness based on the damping of pendulum oscillations Hp. It is shown that as a result of the F-center formation under irradiation with x rays the KCl crystal becomes softer. The discoloring leads to restoration of the $H_{\rm p}$ hardness. LiF crystals harden when irradiated with x and γ rays independently of F-center formation. Irradiation of KCl crystals influences differently different types of hardness. It is shown that Hs, which decreases upon irradiation at ordinary temperatures, increases after irradiation at low temperatures. When crystals are neutron-irradiated, all three types of hardness increase even 1/2

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| leads to a small The process of | stage of irradiation. Low-temper radiation hardening than irradiation hardening is completely ours completely eliminates the hardening at 300 and 7000 is demonstrated | reversible: annealing | of crystals of iso- |
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<u>J. 29925–66 EWT(m)/T/EWP(t)/ETI</u> ACC NR: AR6010584 IJP(c) JD/JG SOURCE CODE: UR/0081/65/000/018/L032/L033 50 AUTHOR: Kvavadze, K. A.; Politov, N. G. \mathcal{B} TITLE: Ionic etching of sodium chloride crystal SOURCE: Ref. zh. Khimiya, Abs. 18L218 REF SOURCE: Sb. Elektron, i ionnyye protsessy v tverd, telakh, No. 1., Tbilisi, Metsniyereba, 1964, 94-97 TOPIC TAGS: ion bombardment, etched crystal, crystal dislocation, sodium ahloride ABSTRACT: The possibility of dislocations appearing on the plane (100) of NaCl crystals as a result of ionic bombardment is shown. This etching method is proposed for fixing crystal structure dislocations during the process of irradiation inside a reactor. A. Urusovskaya SUB CODE: 20/ SUBM DATE: none 10 Card 1/1

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| | ACCESSION NR: AT5023808 UR/0000/62/000/000/0277/0287 5/ | |
| | AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Getiya, M. Sh. 44.65 | |
| | TITLE: Effect of reactor irradiation on the structure and hardness of alkali 37 | |
| | SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniy na materialy. | |
| | Moscow, 1960, Deystviye yadernykh izlucheniy na materialy (The effect of nuclear radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962, | |
| | 277–287 | |
| | TOPIC TAGS: potassium chloride, lithium fluoride, crystal dislocation, hardness, irradiation effect, x ray irradiation, neutron irradiation, gamma irradiation | |
| | ABSTRACT: Potassium chloride and lithium fluoride single crystals were irradiated in the IRT-2000 reactor of the Institut fiziki AN Gruz. SSR (Institute of | |
| | Physics, AN Gruz. SSR) in vertical experimental channel No. 5. The thermal | |
| | neutron flux was nv = 1.03 x 1012 n/cm2 sec. The dislocations were studied by | |
| | etching. The dislocation density in KC1 crystals is unaffected by the x-rays in the dose interval employed. Beginning at an integral dose of ~1016 n/cm2, the | ·-·· |
| | reactor irradiation causes the dislocation density to rise sharply. Long before the appearance of the first dislocations induced by the irradiation, the micro- | |

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ACCESSION NR: AT5023808

hardness of KC1 and LiF crystals begins to increase with the irradiation time. Thermal treatment of irradiated LiF crystals at 250C restores the initial microhardness only partially, whereas thermal treatment at 500C reestablishes the original mechanical properties of the crystals completely. The dislocation density in irradiated samples remains unchanged as a result of annealing at 2500 as compared to nonannealed samples. Consequently, dislocations which formed during irradiation may under certain conditions have no effect on the microhardness during irradiation may under the treatment causes a decrease of dislocation of the irradiated samples. Thermal treatment causes a decrease of dislocations density beginning at 350C. In LiF crystals annealed at 700C, no dislocations are observed with the ald of the technique employed, perhaps because they are completely masked by square pores. Orig. art. has: 9 figures.

ASSOCIATION: none

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OTHER: 003

CIA-RDP86-00513R001341810016-6" APPROVED FOR RELEASE: 06/15/2000

<u>L 2437-66</u> ENT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG/GG/GS ACCESSION NR: AT5023807 UR/0000/62/000/000/0268/0276 62 AUTHOR: Andronikashvili, E. L.; Politov, N. G.; Vorozheykina, L. F. TIME: Effect of lattice disturbances on the mechanical and optical properties of potassium chloride crystals SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniy na materialy. Moscow, 1960. Deystviye yadernykh izlucheniy na materialy (The effect of nuclear radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962, TOFIC TAGS: potassium chloride, crystal lattice defect, F band, color center, irradiation effect, hardness, x ray irradiation, neutron irradiation, gamma ABSTRACT: The paper presents initial results of studies undertaken at the Institut fiziki AN Gruz. SSR (Institute of Physics AN Gruz SSR) for the purpose of determining the relationship between various types of lattice disturbances and the hardness of alkali halide erystals. Various methods of inducing the disturbances were employed (additive coloring, x-irradiation, and irradiation with mixed neutron and gamma radiation in the IRT-2000 reactor). Additive and Subtractive coloring of KC1 single crystals caused a decrease in microhardness and

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scratch hardness; the latter was more sensitive to change in the number of F-centers than the former. Upon exposure to n, Y-radiation, the microhardness and scratch hardness behave differently as the dose increases. It is suggested that this irrediation causes, in addition to the formation of F-centers, new kinds of lattice disturbances which even at low concentrations mask the influence of F-centers on the microhardness effect. The hypothesis that the same defects may affect different types of hardness to different degrees is confirmed. Furthermore, situations arise where different types of hardness change in different directions under the same conditions. This indicates that each type of hardness has a predominant relationship with certain definite types of lattice disturbances. Studies of the influence of x-rays on the F-band intensity show that the number of I'-centers changes in a complex manner with increasing irradiation time. Orig. art, has: 10 figures.

ASSOCIATION: none

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NO REF SOV: 003

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| AUTHOR: Kva | radze, K.A.; Politov, N.G. |
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| ORG: none | |
| TITIE: Ioni | c attack on sodium chloride crystals |
| SOURCE: Ref | . zh. Fizika, 7E337 |
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| REF SOURCE: Metsniyerebs | Sb. Elektron. i ionnyye protsessy v tverd. telakh. No. 1, Tbilisi, , 1964, 94-97 |
| | reactor, radiation instrument, crystal structure, crystal dislocation |
| TRANSIATION: | The possibility is shown for exposing the dislocation yield on faces crystals as a result of ionic attacks. It is proposed to use this method crystals as a result of crystals during the radiation |
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BAKHTOV, S.G., dotsent; POLITOV, S.N.

Method for determining the alkalinity of milk with bromothymol blue. Veterinaria 42 no.7:79 Jl '65. (MIRA 18:9)

1. Moskovskaya veterinarnaya akademiya (for Bakhtov). 2. Glavnyy veterinarnyy vrach sovkhoza "Voskresenskoye", Moskovskoy oblasti (for Politov).

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| ACC NR: AP5026751 | SOURCE CODE: UR/0286/65/ | 000 (017 (0007 (0007 | 7 |
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| INVENTOR: Artemenko, Ye. P.; Politoya. | A. Ye.; Polchaninov, V. A. | ; Nekroyenko, N. | |
| V.; Ziemskov, B. A. | 341 | Hoy | |
| TITLE: A multisectional collapsible giby Organization of the Ministry of Defer SSSR) | rder post. Class 21, No. 1 nse SSSR (Organizatsiya Min | 74226 [announced isterstva oborony | |
| SOURCE: Byulleten' izobreteniy i tovar | nykh znakov, no. 17, 1965, | 25-26 | |
| TOPIC TAGS: hoisting equipment, constru | uction machinery | | |
| ABSTRACT: This Author's Certificate in post of improved operational reliability hoisting carriage is fastened in a gap which is connected with a pivoted block This carriage contains a spring-return a triangular groove and trihedral teeth | in the load chain by means of used for forced collapse of | cate No. 158606. A of a hinged link | |
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L 59206-65 EWT(m)/T/EWP(b)/EWA(d)/EWP(w)/EWP(t) IJP(c) JD ACCESSION NR: AR5017546 UR/0058/65/000/006/E066/E066 Spurce: Ref. zh. Fizika, Abs. 6E519 AUTHORS; Lozovskiy, V. N.; Politova, N. F.; Gershanov, V. Yu. TITLE: Effect of the work function of the metal on the rectifying properties of a metal-silicon contact Clark Source: Uch. zap Kabardino-Balkarsk. un-t. Ser. fiz.-matem n., vyp. 19, 1963, 329-334 TOPIC TAGS: work function, rectifier action, contact potential difference, barrier rectification, leakage current TEANSLATION: An investigation was made of the dependence of the height of the barrier on the contact potential difference under conditions which exclude the influence of the surface leakage current. An investigation of the inverse branch of the voltage-current characteristic of Ca, Mg, Cr, Cu, and Pt contacts sputtered on Si (resistivity 10--12 ohom-cm) has shown that there is a clear-cut correlation between the work function of the metal and the usual (volume) component of the barrier current, i.e., the height of the barrier. The type of surface finish of the silicon greatly influences the magnitude of the ordinary parrier current, but Carel 1/2

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| urder the experimental confect of the contact pot | nditions the surface levels ential difference, and its | do not screen con role is clearly m | pletely the mifest. |
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ACCESSION NR: AR5013778

UR/0275/65/000/004/B020/B020

SOURCE: Ref. zh. Elektronika i yeye primeneniye. Sv. t., Abs. 4B146

AUTHOR: Lozovskiy, V. N.; Politova, N. F.; Gershanov, V. Yu.

TITLE: Effect of the metal work function on the rectifying characteristics of a metal-silicon contact

CITED SOURCE: Uch. zap. Kabardino-Balkarsk. un-t. Ser. fiz.matem. n., vyp. 19, 1963, 329-334

TOPIC TAGS: semiconductor diode, silicon diode, work function

TRANSLATION: The effect of contact potential difference on barrier height, with no interference from the surface leakage current, has been investigated. Studies of the reverse branch of the current-voltage characteristic of Ca, Mg, Cr, Cu, and Pt contacts sprayed upon a 10--12-ohm-cm silicon have shown that a fairly definite correlation exists between the metal work function, the ordinary component of the inverse current, and the barrier height. This correlation does not extend to the total leakage current. The surface processing has also an essential influence on the ordinary reverse current; however, under experimental

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| ACCESSION NR: AR5013778 conditions, the surface levels only partially mask the action of the contact potential difference, and its role can be clearly seen. Bibl. 8. SUB CODE: EC ENCL: 00 | L 01129-66 | |
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DAVITASHVILI, T.Sh.; FOLITOV, N.G.

F-centers in notassium chloride crystals irradiated in a reactor.
Opt. i spektr. 17 no.6:871-879 D '64. (MIRA 18:3)

ANDRONIKASHVILI, E.L.; POLITOV, N.G.; GETIYA, M.Sh.; VOROZHEYKINA, L.F.

Radiation damages in ionic crystals. Izv. AN SSSR. Ser.fiz. 29
10.31366-370 Mr '65. (MIRA 18:4)

VOROZHEYKINA, L.F.; IGITKHANISHVILI, D.D.; POLITOV, N.G.; KVACHADZE, V.G.

Electric and thermal conductivities and optical absorption in irradiated alkali metal halide crystals. Izv. AN SSSR Ser. fiz. 29 no.1:75-77 Ja '65. (MIRA 18:2)

1. Institut fiziki AN GruzSSR.

L 16286-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWP(t)/EWP(b) Pr-4/Pt-10/Pu-4 IJP(c)/ESD(gs)/ESD(t)/BSD/AFWL/ASD(a)-5/AS(mp)-2/APGC(b) JD/JG/GG

ACCESSION NR: AP5000546 S/0051/64/017/006/0871/0879

AUTHORS: Davitashvili, T. Sh.; Politov, N. G.

TITLE: F centers in potassium chloride crystals irradiated in a

reactor

SOURCE: Optika i spektroskopiya, v. 17, no. 6, 1964, 871-879

TOPIC TAGS: F center, potassium compound, neutron irradiation, x ray irradiation, optical absorption, absorption spectrum, crystal

lattice distortion

ABSTRACT: To check on the possible changes in the parameters of the F band as a result of irradiation of crystals in the active zone of an atomic reactor, the authors studied the F-band in the spectra of additional optical absorption of potassium chlorite crystals irradiated with neutrons in a reactor (10¹² neut/cm² sec) and by a ZBP(D)-200 x-ray tube (65 kV, 10 mA). Some 10--15

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L 16286-65 ACCESSION NR: AP5000546

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samples measuring $16 \times 8 \times (2--0.5)$ mm were cut from a single crystal ingot grown by the Kiropoulos method from "specially pure" material. The samples were simultaneously irradiated at fixed points of the active zone of the atomic reactor, in integral neutron fluxes 2.16 x 10^{16} -3.6 x 10^{17} neut/cm². The irradiated samples were stored for some time (up to a month) to allow the induced radioactivity to drop to a permissible level. "Self-colored" and x-ray irradiated samples were investigated in parallel. The selfcoloring was produced by the residual radioactivity of a crystal exposed to a neutron flux 3.6 x 10^{17} neut/cm² and stored for 21 months in darkness at room temperature. The optical absorption spectra were measured with SF-4 spectrophotometer with a cryostatic attachment that made measurements possible in the range 85--300K. The results show that the half-width of the F-band increases with increasing integral neutron flux. An investigation of the form and temperature dependences of the parameters of the separated F-band has shown that the observed broadening is not the result of over-

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ACCESSION NR: AP5000546

lapping different bands, but is due to the interaction of the F-center with the distorted crystal lattice. The conclusions are corroborated by a comparison of the theoretical parameters for F-centers with ideal and distorted crystal environments. Orig. art. has: 7 figures, 4 formulas, and 1 table.

ASSOCIATION: None

SUBMITTED: 20Nov63

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 007

还是这种,我们就是这种的人,一种的是是是是一种的人,我们就是一种的人,我们就是一种的人,我们就是一种的人,我们就是这种的人,我们就是我们的人,我们就是我们的人,我 "我们就是我们是我们是我们的人,一种的人,我们就是我们的人,我们就是我们的人,我们就是我们的人,我们就是我们的人,我们就是我们的人,我们就是我们就是我们的人,我们

POLITOV, Oleg Aleksandrovich; BOGORAD, Yu.D., nauchn. red.;

[Drilling tool for drilling deep oil and gas wells; digest of foreign patents] Rurovoi instrument dlia bureniin glubo-kikh neftianykh i gazovykh skvazhin; obzor inostrarnykh patentov. Moskva, TsNIIPI, 1964. 24 p. (MIRA 18:3)

Lock for a vaginal speculum. Zhivotnovodstvo 23 nc.8181-82
Ag '61. (MIRA 16:2)

1. Sovkhos "Voskresenskoye" Moskovskoy oblasti.
(Speculum (Medicine))
(Artificial insemination—Equipment and supplies)

USSR/Form Animals. Cattle.

Q

Abs Jour: Ref Zhur-Biol., No 17, 1958, 78729

Author : Politov, S. N.
Inst

Title : On Optimal Periods of Mating of Cows After Calving.

Orig Pub: Zhivotnovodstvo, 1957, No 8, 52-60.

Abstract: No abstract.

: 1/1 Card

POLITOV, S. H., CHERNAVEKIY, F. V., TIKHCUTH, I. Ya., FELTCHTEVE, F. A., and

"Means for dehorming calves and cattle."

Veterinariya, Vol. 38 No. 5, 1961

Politov, S. N. -Veterinary Surgeon-Moscow Technological Institute of Meat and

UVACHAN, Vasiliy Nikolayevich; SERGEYEV, M.A., red.; POLITOV, Z., red.;
MUKHIN, Yu., tekhn.red.

[Transition to socialism of small national groups in the North; based on data for the Evenki and Taimyr national areas] Perekhod k sotsializmu malykh narodov Severa; po materialam Evenkiiskogo i Taimyrskogo natsional nykh okrugov. Pod red. M.A. Sergeeva.
Moskva, Gos.izd-vo polit.lit-ry, 1958. 182 p. (MIRA 12:2)

(Evenki National Area—Economic conditions)

(Taimyr National Area—Economic conditions)

BORISOV, Yuriy Stepenovich; PCLITOV, Z., red.; TROYANOV:XAYA, N., tekhn.red.

[Twenty-five thousand envoys to collective farms] 25-tysiachniki. Noskva, Gos.izd-vo polit.lit-ry, 1959. 93 p. (MIRA 13:4)

(Collective farms)

Control of the second control of the second second

ZVEZDIN, Z.K., nauchnyy sotrudnik; ROGACHEVSKAYA, L.S., nauchnyy sotrudnik; VOLKOVA, N.F., mladshiy nauchnyy sotrudnik; KIM, M.P., doktor istoricheskikh nauk, red.; POLITOV, Z., red.; TYUNEYEVA, A., tekhn.red. [First steps in the industrialisation of the U.S.S.R., 1926-1927] Pervye shagi industrializatsii SSSR, 1926-1927 gg. Moskva, Gos. isd-vo polit.lit-ry, 1959. 532 p. (MIRA 12:5) 1. Akademiya nauk SSSR. Institut istorii. 2. TSentral'nyy gosudarstvennyy arkhiv Oktyabr'skoy revolyutsii i sotsialisticheskogo stroitel'stve SSSR (for Zvezdin). 3. Institut istorii AN SSSR

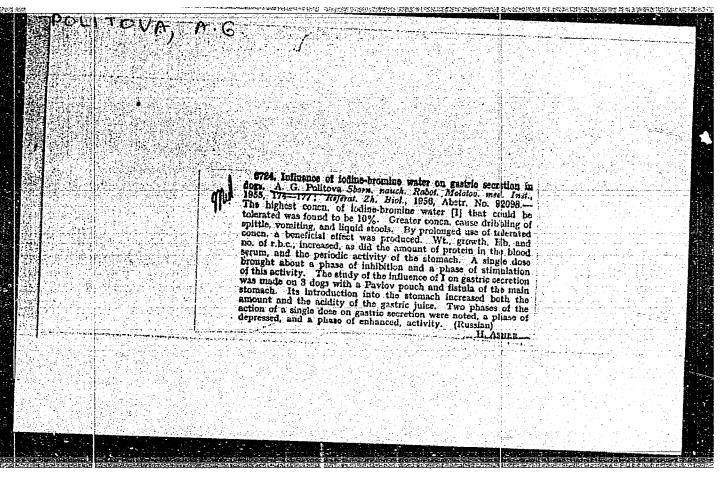
(Russia--Industries)

(for Rogachevskaya, Volkova).

KHAVIN, Abram Fishelevich, zhurnalis; POLITOV, Z., red.; DANILINA, A., tekhn. red.

[Concise study of industrialization in the U.S.S.R.] Kratkdi ocherk istorii industrializatsii SSSR. Moskva, Gos. izd-vo polit. lit-ry, 1962. 436 p. (MIRA 15:4)

(Russia—Industries)



AUTHOR:

EL'YASHEVA, M.A., POLITOVA, A.I.

32-6-32/54

TITLE:

The Automatic Arrangement of a Hydraulic Machine for Investigations with Repeated Static Stresses. (Avtomaticheskoye ustroystvo k gidravlicheskoy mashine dlya ispytaniya povtorno-stationeskimi

nagruzkami, Russian)

PERIODICAL:

Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 741-742 (U.S.S.R.)

ABSTRACT:

For the purpose of investigating the static resistibility of materials hydraulic tensile testing machines (produced by the firm of Losenhausen as well as of the Russian type MUG) of 15 t each were used. They consist of a distributor box with 2 manameters (with adjustable contacts), a directioning device, a selenoid with lever transmission leading to the exhaust valve and a panel with the electric equipment. The box serves for the distribution of oil either to the manometer (in the case of investigations with repeated static stresses) or to the pendulum dynamometer (for static investigations). The distributor box together with the pendulum dynamometer is connected with the tube system leading to the cylinder. This system is used for measuring force. Stresses and loads are controlled by means of one of the two manameters, which are brought about automatically by means of two contacts

Card 1/2

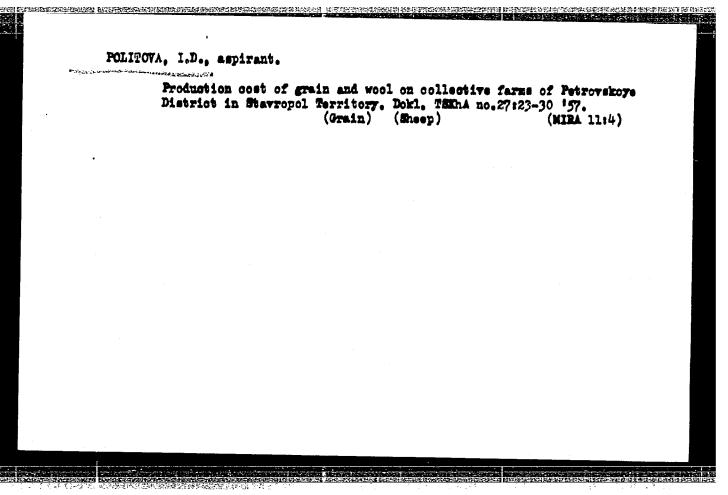
GORIN, A.P., prof.; DUNIN, M.S.; KONOVALOV, Yu.B.; MITROFANOVA, K.S.; POLITOVA, I.D.; SAMSONOV, M.P.; SELAVRI, M.K.; UKOLOV, A.A.; YURTSEV, V.N.; CRACHEVA, V.S., red.;

[Manual on field work in the breeding and seed production of field crops] Rukovodstvo k prakticheskim zaniatiiam po taktsii i semenovodstvu polevykh kul'tur. [By] A.P.Gorin i dr. Moskva, Sel'khozizdat, 1963. 574 p.

(MIRA 16:12)

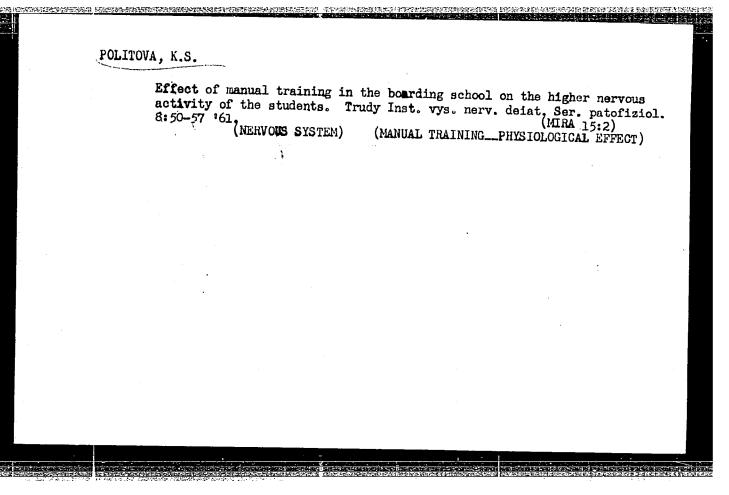
1. Kollektiv prepodavateley kafedry genetiki, selektsii i semenovodstva polevykh kul'tur Moskovskoy sel'skokhozyay-stvennoy akademii im. K.A.Timiryazeva (for Gorin, Konovalov, Mitrofanova, Samsonov, Selavri, Ukolov, Yurtsev). 2. Kafedra Fitopatologii Moskovskoy sel'skokhozyaystvennoy akademii im. K.A.Timiryazeva (for Dunin). 3. Kafedra statistiki Moskovskoy sel'skokhozyaystvennoy akademii im. K.A.Timiryazeva (for Politova).

(Field crops) (Seed production)



Study of the biology and physiology of branched wheat. Trudy Mar.fin.gos.un. 6 no.3:3-22 '54. (MLRA 10:2)

1. Eafedra fiziologii rasteniy. (Wheat)



SHUMILOV, V. (pos.Svecha, Kirovskaya obl.); BURAVLEV, V.; FOMIN, A., mekhanik; NIKONCHIK, V.; POLITOVA, L.

From our mail. Mest-prom.i khud.promys. 3 no.5:35 My '62. (MIRA 15:6

l. Nachal'nik mebel'nogo tsekha Pestovskogo rayonnogo promyshlennogo kombinata Novgorodskogo oblmestproma (for Buravlev). 2. Gorodishchenskiy rayonnyy promyshlennyy kombinat, Volgogradskaya oblast' (for Fomin).

(Industry)

41026

197700

S/058/62/000/009/066/069 A057/A101

AUTHORS:

Gontar', P. I., Politova, N. F.

TIME:

Experimental investigation of the transition resistance of the contact of a metal with a semiconductor.

PERIODICAL:

Referativnyy zhurnal, Fizika, no. 9, 1962, 9, abstract 9-4-17u ("Tr. Novocherk. politekhn. in-ta", 1961, 118, 63 - 64)

TEXT: The quality of measuring contacts (C), applied by the electrolytic method on samples of monocrystalline Si, was investigated. The quality of the C was characterized by the value of the transition resistance $\Delta R = (R-R_O)/2S$, where R and R_O stand for the resistance of the sample with the applied C and without C respectively; S = surface of the applied C. R was measured by the voltmeter-amperemeter method, R_O was determined by the geometric dimensions of the sample and its specific resistance, measured by the probe method with a compensation circuit. The adopted determination of ΔR yields the mean value of the transition resistance of two C of one material applied by the same method. The scatter of ΔR values at different measurements did not exceed 30%. It was

Card 1/2

Experimental investigation of the...

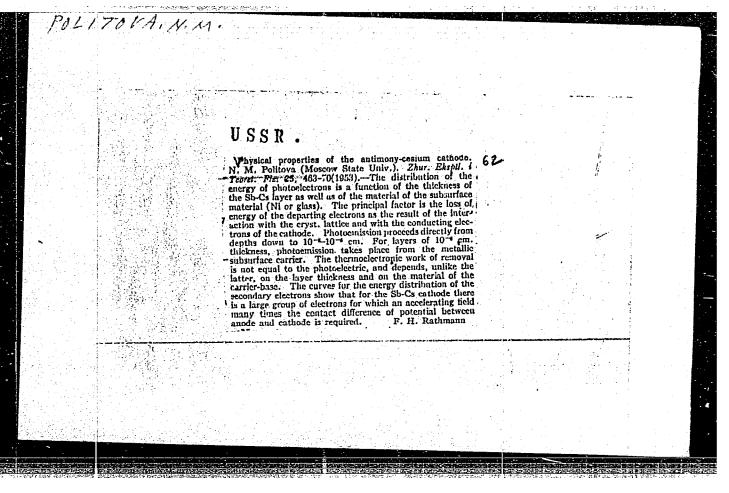
S/058/62/000/009/066/069 A057/A101

observed that iron and copper C oxidize relatively quickly in air; as a result their ΔR changes with time. Nickel and cobalt C have considerable ΔR . Most suitable contacts for Si are those of palladium. There are 8 references.

E. P.

[Abstracter's note: Complete translation]

Card 2/2

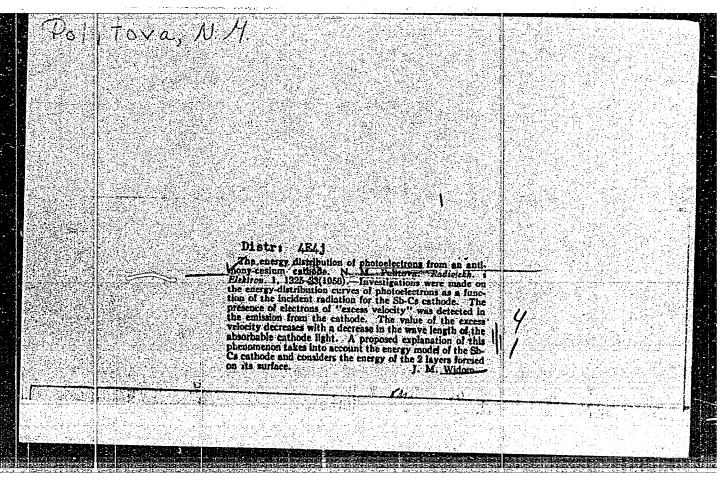


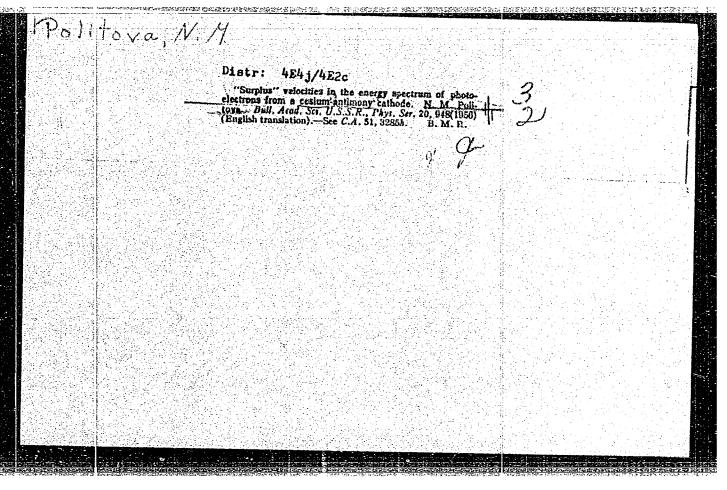
POLITOVA, N. M.

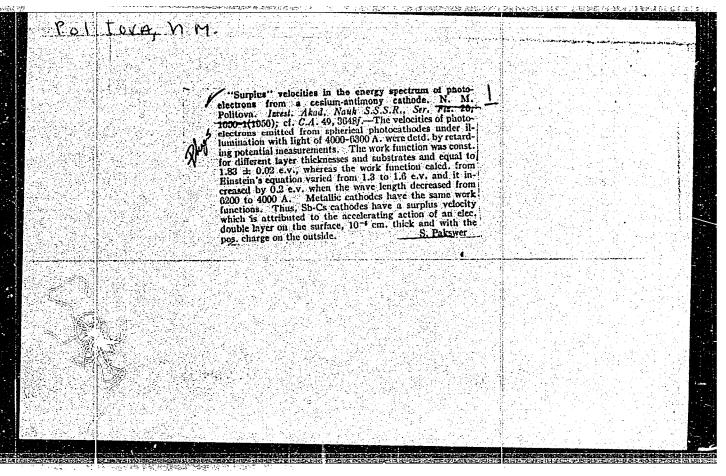
で、マールースとのいうな話を対象を記録を記録を記録を見せると

"Investigation of the Emission Properties of Cesium-Antimony Cathodes." Cand Phys-Math Sci, Moscow State U, Moscow, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12) SO: Sum. No. 556, 24 Jun 55







Vasil'yev, G.F., Politova, N.M., Shabel nikova, A.E., AUTHORS:

Pervova, L.Ya. and Yasnopol'skaya, A.A.

Interdepartmental Seminaron Cathode Electronics (The 11th TITLE:

Meeting) (Mezhduvedomstvennyy seminar po katodnoy

elektronike) (11-e zasedaniye)

Radiotekhnika i elektronika, 1959, Vol 4, Nr 4, PERIODICAL:

pp 731 - 732 (USSR)

A meeting of the seminar took rlace on December 1, 1958 ABSTRACT:

at the Institut radiotekhniki i elektroniki AN SSSR (Institute of Radio-engineering and Electronics of the Ac.Sc.USSR). During the meeting 8 papers were read. Yu.G. Ptushinskiy read a paper entitled: "Kinetics of the Adsorption of Oxygen on the Surface of Tungsten".

The second paper, by I.M. Dykman and S.M. Pekar,

dealt with "The Admixture Photo-effect of Semiconductors in the Region of the Exciton Light Absorption". The paper by T.L. Matskevich was devoted to "The Problem of

the Secondary Electron Emission of Fine Films of a Number of Organic Substances". The problem of "Surface

Ionisation in a Strong Electric Field on a Surface with Card1/2

Interdepartmental Seminar on Cathode Electronics (The 11th Meeting)

a Non-homogeneous Work Function" was considered by E.Ya. Zandberg and N.I. Ionov. I.N. Bakulina and N.I. Ionov read a paper entitled "Determination of the Electron Attachment Energy and of the Potentials of Atoms by the Method of Surface Ionisation". N.L. Yasnopoliskiy and A.P. Alekseyevadealt with the problem of "Passage of Steady-state Currents Through a Dielectric When the Current Carriers Arc Introduced Through One of the Contacts by Means of Electron Bombardment". The lecture by D.A. Ganichev and K.G. Utkin discussed the following -"The Possibility of the Analysis of the Total-energy Distribution of Electrons in a Quasi-spherical Condenser". The work by M.L. Kapitsa, S.A. Fridrikhov and A.R. Shul'man dealt with an investigation of the secondary electron emission and the characteristic energy losses of a number of dielectrics (glass, mica, fluorite and alkali-haloid monocrystals).

Card 2/2

USCOMM_DC_60997

| AUTHORS: Basalayeva N.Ta. Vikhlyayeva B.P. thean A.G. |
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| AUTHORS: Basalayeva, N.Ta., Vikhlyayeva, R.P., Enden, A.Q. Zernow, D.V., Kofsmora, I.L., Ferrera, L.I. TOTUCA, T.M., Fellyaheva, M.A., 1952, R.J., Spivek, G.Y., inhabitation, A.E., and lanangol'skaya, A.A. Report on the Minch All-Union Conference on Cathode Electronics PRIODICAL: Redoctablinika i elektronika, 1960, Vol 5, Nr 5, pp 866-879 (USSR) ABSTRACT: This conference took place in Moscow from 21-20th October 1959 with the participation of Soviat aciantists and guests from Hungary Research the organization committee was Assimated via Michinaka the organization committee was Assimated to the section of the sonference. 15 Reports were presented in the section adsorption of paperties of solid desing with electron adsorption of paperties of solid desing with electron adsorption of paperties of solid desing with electron adsorption on thermionic emission. 17 Papers were presented in the section on photoslectric emission, Many papers discussed industrial themselves of photocells and wellipliers. 15 Papers were presented at the section on thermionic emission. 17 Papers were presented at the organization of section on field emission heard 11 consession. The section on field emission heard 11 consessions the section on field emission heard 11 consessions the section of field emission of seniconductory and the "condenser" cathode. More than 30 papers and brief communications were presented at the section of properties, new types and technology of cathodes, trelating to the technology of various types of cathodes, the behaviour in pagetion on interest. 19 Papers were given at the section on interest. 19 Papers were given at the |
| Zernov. D.V Extension 1.1. Program. L.T Fortical. L.T Fortical. L.T Fortical. L.T Shakes M. Fortical. L.T Fortical. L.T Shakes J. Spivak, G.V Shakes J. Spivak, A.L. and Innopolitaky, A.L. Shakes J. Spivak, G.V Shakes J. Spivak, A.L. and Innopolitaky, A.L. Shakes J. Spivak, G.V Title: Report on the Minth All-Union Conference on Cathode Electronics PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 5, pp 866-379 (USSE) ABSTRACT: This conference took place in Mosrow from 21-20th October 1959 with the participation of Soviet acientists and guests from Hungary, Experience of Soviet acientists and guests from Hungary, Experience of Content of the Chinese Peoples' Republic and Cascholevakian The Chinese Peoples' Republic and Cascholevakian The Maintann of the conference. IS Reports were presented in the section on surface properties of solide dealing with electron adoption and siructural properties of active surface false. Electron-optical studies of "patch fields" on eaction on the section on secondary-electron esission. The section on field esission heard ill papers discount place field esission heard ill papers discount place field esission at high current densities, surface phenomena, field esission at high current densities, surface phenomena, field esission of sessionductor/and the "Condensare" cathode. Hore than 30 papers and brief communications were presented at the section on properties, new types and technology of cathodes, relating to the technology of featheres. 19 Papers were given at the section on inflatored action on interest on the section on inflatored action on interest were given at the section on inflatored action on interest were given at the section on inflatored actions of individual cathese and the operating methods action at the section on interest were given at the section on i |
| Report on the Minth All-Union Conference on Cathode PARIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 5, pp 866-879 (USSA) ABSTRACT: This conference took place in Moscow from 21-2dth October 1939 with the participation of Soviet acientists and guests from Hungary, Kastwin Germany, the Chinese Peoples' Republic and Catecholevakis. The chairman of the organization can discholevakis. The chairman of the organization can descholevakis. The sport consists of briwes Academician Vekshinakiy, presented at the plenery assenties and the sections of the conference. 15 Reports were presented in the section on surface properties of solid dealing cith electron adsorption and structurel properties of active action on surface properties of solid dealing cith electron adsorption and structurel properties of active action on eacities. Electron-optical studies of "patch fields" on emitting surfaces were discussed. 6 Papers on the physics of semiconductor cathodes were given in the section on theraionic emission. 17 Papers were 1 presented in the section on photoelectric emission. Many papers discussed industrial technology of photocella and multipliers. 16 Papers were presented at the section on econdary-electron emission. The section on field emission of semiconductoral and the "Condenser" cathods. How than 30 papers and brief communications were presented at the section on properties, new types and technology of cathodes, relating to the technology of individual cathodes of the operating sechanisms of individual cathodes of the operating sechanisms of individual cathodes of the operating sechanisms of individual cathodes. |
| PERIODICAL: Radiotakhnika i elektronika, 1960, Vol 5, Nr 5, pp 866-879 (USSR) ABSTRACTI This conference wook place in Moscow from 21-20th October 1939 with the perticipation of Soviet scientists and guests from Hungary, Estern Germany, the Chinese Peoples' Republic and technical Remay, the Chinese The conference of the organization committee from the Remay of the conference of brief abstract for Washinskiy. The report consists of brief abstract for the science of the conference. It Reports were presented in the plenary sessions and the science of the conference. It Reports were presented in the conference of the co |
| This conference took place in Moscow from 21-2dith October 1939 with the participation of Soviet scientists and guests from Hungery, taketern dermany, the Chinese Peoples' Republic and Caechoslevakia. The chairman of the organization committee was Academician Vekshinskiy. The report consists of brief abatracts of 125 papers presented at the plenary sessions and the sections of the conference. 15 Reports were presented in the section on surface properties of breath dealing with electron adsorption and structural properties of active surface films. Electron-optical studies of "patch fields" on emitting surfaces were discussed. 6 Papers on the Card 1/2 emitting surfaces were discussed. 6 Papers on the physics of semiconductor cathodes were given in the section on thermionic emission. 17 Papers were presented in the section on photoelectric emission. Many papers discussed industrial technology of photocells and multipliers. 16 Papers were presented at the section on secondary-electron emission. The acction on field emission therefore the papers and brief communications field emission of semiconductors/and the "condenser" cathods. More than 30 papers and brief communications were presented at the section on properties, new types and technology of cathods, relating to the technology of various types of cathods, their behaviour in practical devices and the operating mechanisms of individual cathodes. 19 Papers were given at the section on interaction of solid here given at the |
| The report consists of brief shatracts of 125 papers presented at the plenery sessions and the sections of the conference. 15 Reports were presented in the section on surface properties of solide dealing with electron adsorption and structural properties of active surface films. Electron-optical studies of "patch flelis" on emitting surfaces were discussed. 6 Papers on the physics of semiconductor cathodes were given in the section on thermionic emission. 17 Papers were presented in the section on photoelectric emission. Many papers discussed industrial technology of photoells and multipliers. 16 Papers were presented at the section on secondary-electron emission. The section on field emission heard 11 papers discussing pulse field emission at high current densities, surface phenomena, field emission of semiconductors and the "condenser" cathods. Hore than 30 papers and brief communications were presented at the section on properties, new types and technology of cathodes, relating to the technology of various types of cathodes, their behaviour in practical devices and the operating mechanisms of individual cathodes. 19 Papers were given at the section on interaction of solid hodes with the section on interaction of solid hodes. |
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| individual cathodes. 19 Papers were given at the |
| charged particles and residual gases. Notes of conference discussion indicated that several sharp and |
| Card 2/2 Critical exchanges of views took place. |
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| Card 2/2 Critical exchanges of views took place. |

s/109/60/005/008/011/024 E140/E355

9,4160(3201,1003,1137)

Lifshits, T.M., Kokina, N.G. and Politova, N.M.

Photoelectric Properties of Barium-magnesium AUTHORS: TITLE:

Alloys

Radiotekhnika i elektronika, 1960, Vol. 5, No. 8, pp. 1267 - 1274 PERTODICAL:

A continuation of earlier work (Ref. 1) with the purpose of establishing whether the phenomena observed are of a surface or a volume character. The experimental procedure excluded the possibility of the properties of the Mg-Ba photocathode being due to a barium film on a magnesium surface or oxidation of a surface layer of barium. It is postulated that a stable alloy is formed. The properties are stable in

vacuum between 10-9 and 10-7 mm Hg. The allcy formed is of metallic character, as shown by comparison with pure Mgphotocathodes. The depth of the electron emission from the metal as a function of energy appears to be related to the appearance of a characteristic energy loss due to excitation of plasma oscillations. Their frequency could be determined Card 1/2

ACC NR: AT6020587 SOURCE CODE: UR/0000/65/000/000/0036/0042

AUCHOR: Budakova N. Ye.: Politakova N. Ye.: Pol

AUTHOR: Rudakova, N. Ya.; Polishchuk, S. A.; Sheremeta, B. K.; Sereda, Z. Ya.

ORG: UkrNIIgiproneft ky

TIME: Physicochemical properties and group composition of petroleum from Octyabr* field

SOURCE: Neftepererabotka i neftekhimiya (Petroleum refining and petroleum chemistry). Kiev, Naukova dumka, 1965, 36-42

TOPIC TAGS: diesel fuel, gasoline

EWT(m)/T

WE/GD

ABSTRACT: In order to study the physicochemical properties of narrow fractions of <a href="Cktyabr" petroleum" the latter was distilled on an ARN-1 unit up to 220°C at atmospheric pressure and under vacuum above that temperature. Analysis showed a high content of Low-octane gasoline fractions (50.66% up to 200°C) of low detonation stability. The 85-200°C fraction is recommended for use as stock for catalytic reforming in the production of high-octane gasoline. From the 120-220°C fraction, IS-1 fuel/meeting all GOST requirements except the content of aromatic hydrocarbons can be obtained; DL diesel fuel||corresponding to GOST standards in all characteristics can be obtained from the 220-350°C fraction, and DZ diesel fuel/satisfying all the GOST requirements is obtained from the 170-300°C fraction. The 300-350°C fraction may be used as a component of DL diesel fuel. The residue of the distillation of Oktyabr' petroleum up to

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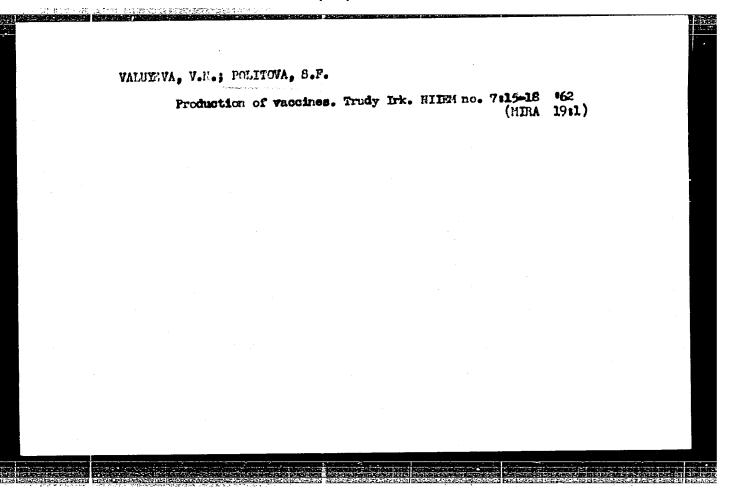
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| | 380°C amon | ints t | to 5% of 1ts | weight and | may be | used a | s cracking | stock | Ond a | | <i>C</i> |
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POLITOVA, S.F.; PETROVA, N.D.

Comparative evaluation of the biological properties of the Leningrad and Moscow strains of a fixed rabies virus. Trudy Irk. NIIEM no. 6:129-133 '61. (MIRA 17:7)

l. Iz antirabicheskoy laboratorii Irkutskogo nauchno-issledova-tel'skogo instituta epidemiologii i mikrobiologii.



CARVEY, N.N.; POLITOVA, Ye.M.; YELPAT'YEVSKAYA, C.N. (Moskva)

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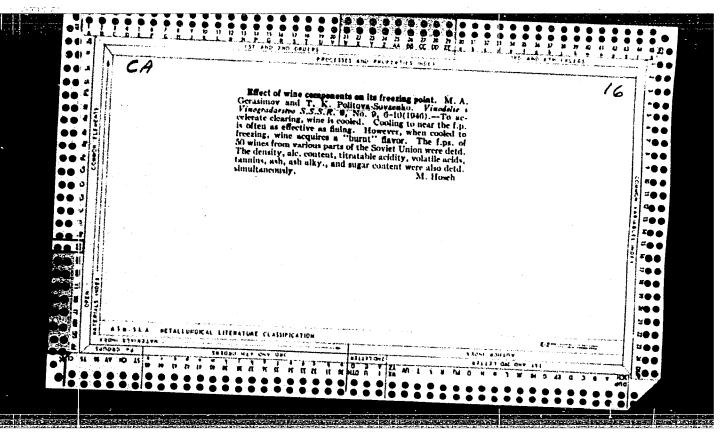
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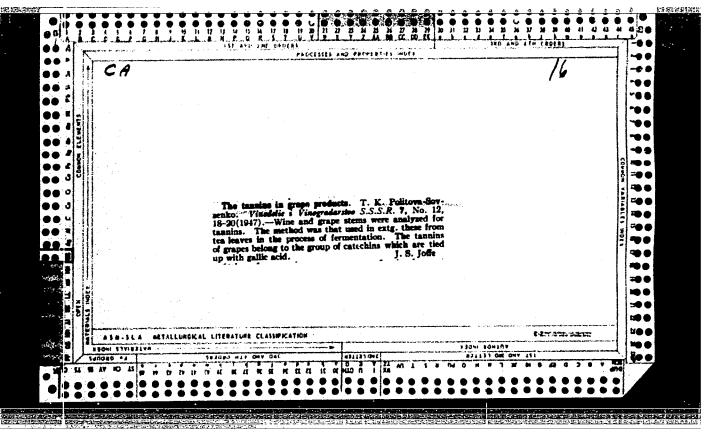
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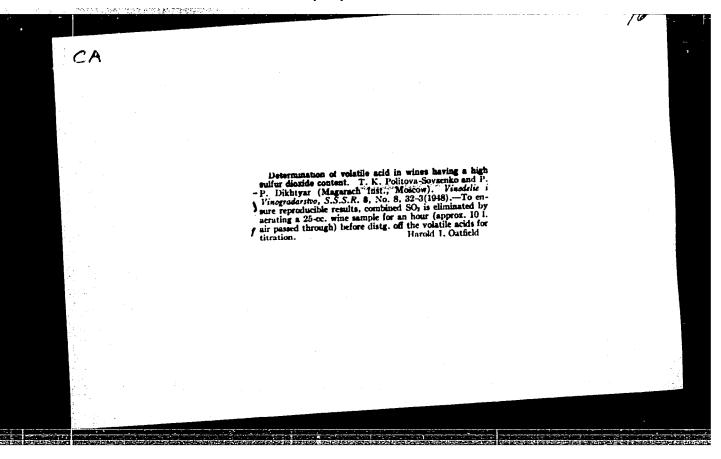
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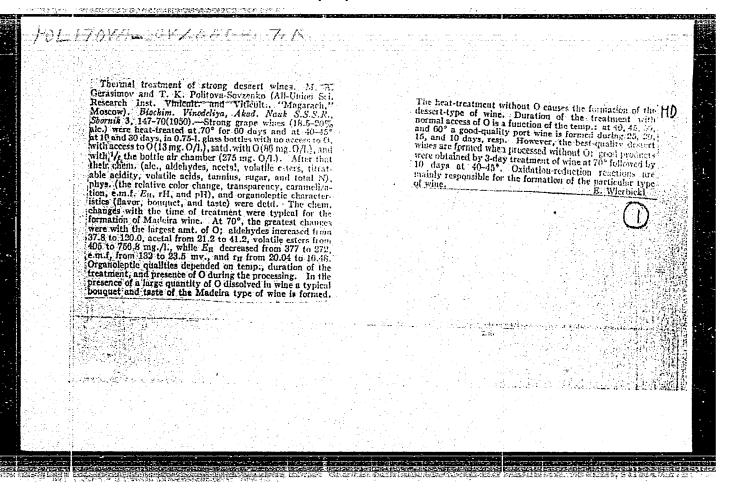
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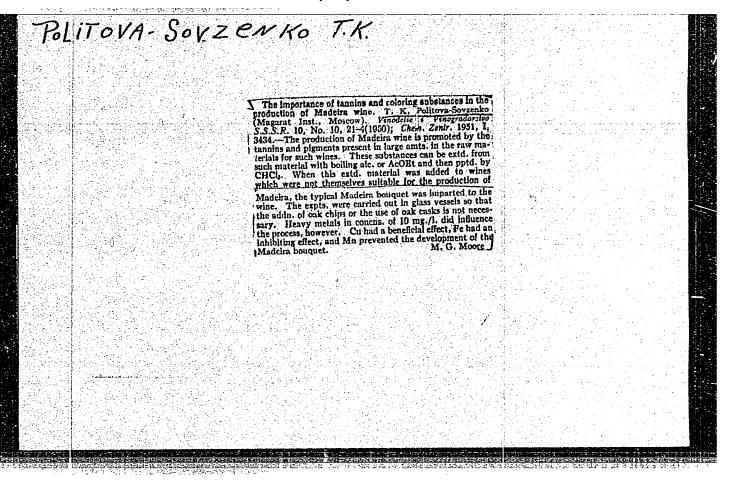
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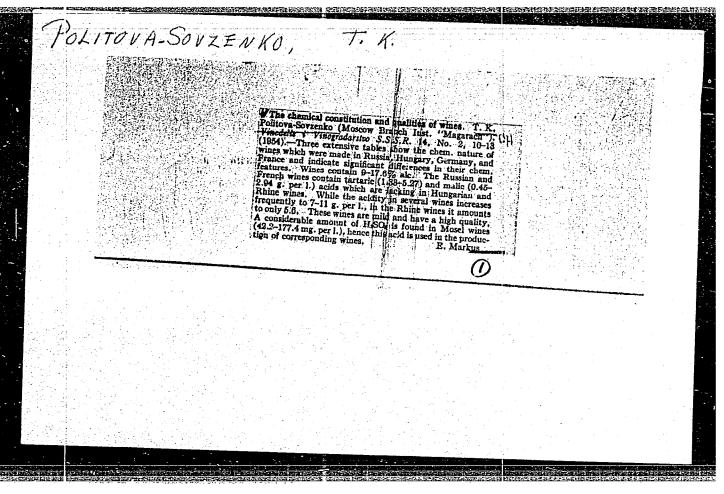
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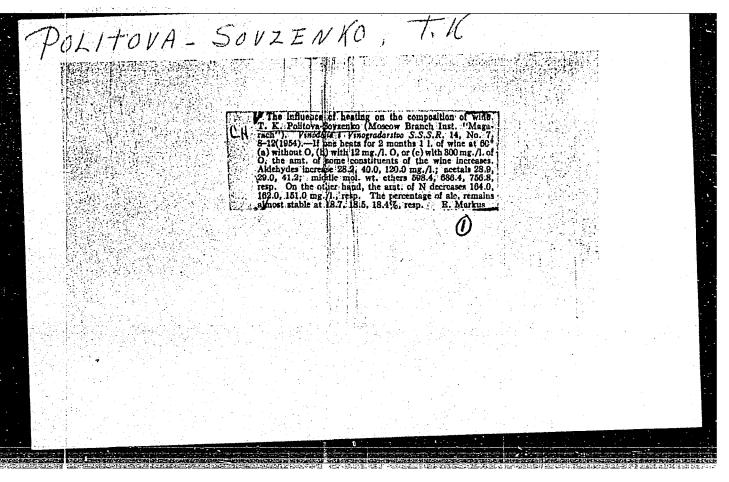
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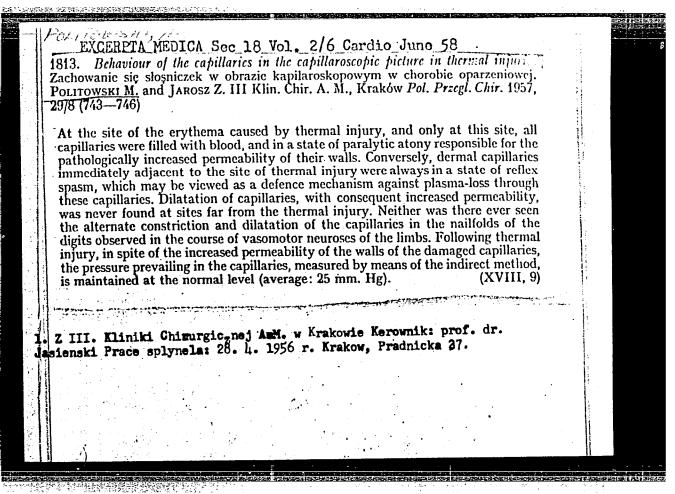
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in capillaries, review (Pol))

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(SKIN, blood supply same)

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In med. Microphologic many at Wajershege Instytutu Higheny
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